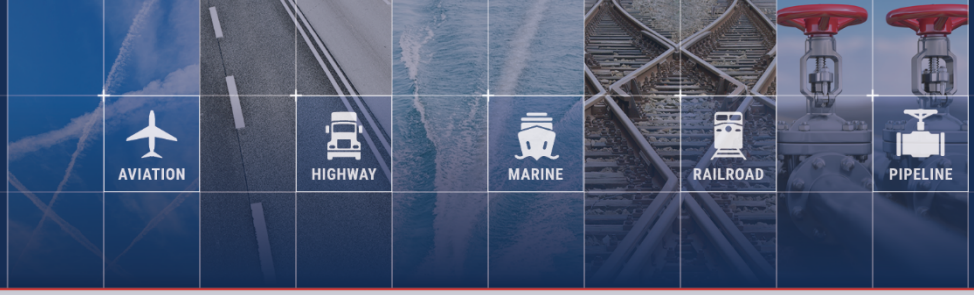


# Aviation Investigation Factual Report

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|---|---|---|---|
| **Location:** | MUSKOGEE, Oklahoma | **Accident Number:** | FTW97LA064 |
| **Date & Time:** | December 17, 1996, 22:07 Local | **Registration:** | N210BG |
| **Aircraft:** | Cessna P210N | **Aircraft Damage:** | Substantial |
| **Defining Event:** | | **Injuries:** | 1 Serious |
| **Flight Conducted Under:** | Part 91: General aviation | | |

## Factual Information

On December 17, 1996, approximately 2207 central standard time, a Cessna P210N, N210BG, registered to Joint Air Inc., and operated by Corporate Aircraft Marketing as a Title 14 CFR Part 91 business flight, was substantially damaged during a forced landing following a loss of power near Muskogee, Oklahoma. Night visual meteorological conditions prevailed and a flight plan was not filed. The airline transport rated pilot was seriously injured. The flight departed Fort Smith, Arkansas, about 47 minutes before the accident.

The operator reported to the investigator-in-charge that he hired the pilot to fly the aircraft from Tulsa, Oklahoma, to Little Rock, Arkansas, then to Gulf Shores, Alabama, for prospective buyers to examine the aircraft, and then fly it back to Tulsa. He further reported that the pilot could not locate the prospective buyer at Little Rock, so he proceeded to Gulf Shores. At Gulf Shores the pilot demonstrated the aircraft to the prospective buyers, and the aircraft was fueled with 25 gallons of 100 octane low lead avgas prior to departing for Tulsa.

The aircraft departed Gulf Shores, Alabama, on an IFR flight plan at approximately 1800, with a destination of Tulsa, Oklahoma. The aircraft diverted to, and landed at the Fort Smith Regional Airport, Fort Smith, Arkansas. The pilot advised the FBO that he had ony $22.00 cash, and asked to purchase as much fuel as he could for that amount. At 2115, nine gallons of 100 octane low lead avgas was added to the right fuel tank.

The aircraft departed for Tulsa, Oklahoma, shortly after the fueling was completed. Razorback approach control reported that the pilot canceled radar services 18 nautical miles northwest of Fort Smith, Arkansas, at an altitude of 10,300 feet MSL. Memphis Center and Fort Smith approach were able to produce a radar track of the flight with the National Track Analysis Program (NTAP). The NTAP indicated that at 2159:05 the aircraft was at 10,400 feet, approximately 10 miles north of the Davis Airport, Muskogee, Oklahoma, when it made a turn to the south and began descending. The last readout from the NTAP was at 2203:39, and showed the aircraft 2 miles north of the airport at 4,200 feet. Fort Smith approach, Tulsa approach, and McAlester AFSS did not receive any emergency transmissions from the aircraft.

The aircraft was reported missing by the operator when it failed to arrive at the Tulsa International Airport. The Civil Air Patrol (CAP) located the aircraft wreckage the following morning at about 0525 on the Davis Airport property approximately 100 feet to the left side of runway 31, abeam the runway identification numbers. According to a CAP representative, "there was no fuel odor and no evidence of a fuel spill." The pilot was not located until 0715, approximately 600 feet from the aircraft.

According to the service manager of Autopilots Central, Inc., after takeoff from Tulsa International Airport, the tower reported to the pilot that smoke was coming from the aircraft.

The pilot returned to the airport, and requested the service manager to examine the aircraft. Following an engine run, it was determined that the pilot was running the engine too rich on takeoff causing black smoke. The service manager instructed the pilot on the required fuel settings to use for takeoff and climb. This aircraft was equiped with a Riley Intercooler conversion, which dictated that the mixture be leaned for takeoff. The pilot then took off the second time with no apparent problems. Autopilots Central, Inc. is a maintenance facility that had been contracted to perform a pre-purchase inspection of the accident aircraft.

Examination of the wreckage by the FAA inspector revealed that the aircraft came to rest upright. The nose landing gear was separated from the fuselage, and left main landing gear was folded under. The right wing was bent outboard of its flap, and one propeller blade was bent aft. Examination of the fuel system revealed that the fuel selector was selected to the right fuel tank, the left fuel tank was dry, and the combined total of fuel drained from all of the fuel tanks was 1.5 gallons.

The aircraft was equipped with the optional Flint Industries auxiliary wingtip fuel tanks, which give the aircraft a total capacity of 120 gallons of usable fuel, and they were topped off prior to the first takeoff at Tulsa. Fuel consumption estimates provided by the manufacturer revealed that there was 154 gallons of usable fuel available for the flight, and it was estimated that it would require 154 gallons to reach Muskogee with no reserve. These estimates do not include the second takeoff that was made at Tulsa.

Attempts to obtain a completed Pilot/Operator Aircraft Accident Report, NTSB Form 6120.1/2, were unsuccessful.

## Pilot Information

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|---|---|---|---|
| **Certificate:** | Airline transport; Commercial; Flight instructor | **Age:** | 53,Male |
| **Airplane Rating(s):** | Single-engine land; Multi-engine land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | |
| **Instrument Rating(s):** | Airplane | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | Airplane multi-engine; Airplane single-engine | **Toxicology Performed:** | No |
| **Medical Certification:** | Class 1 Valid Medical--no waivers/lim. | **Last FAA Medical Exam:** | September 4, 1996 |
| **Occupational Pilot:** | Yes | **Last Flight Review or Equivalent:** | |
| **Flight Time:** | 11450 hours (Total, all aircraft) | | |

## Aircraft and Owner/Operator Information

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| **Aircraft Make:** | Cessna | **Registration:** | N210BG |
| **Model/Series:** | P210N P210N | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | | **Amateur Built:** | |
| **Airworthiness Certificate:** | Normal | **Serial Number:** | P21000025 |
| **Landing Gear Type:** | Retractable - Tricycle | **Seats:** | 6 |
| **Date/Type of Last Inspection:** | June 26, 1996 Annual | **Certified Max Gross Wt.:** | 4000 lbs |
| **Time Since Last Inspection:** | 101 Hrs | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | 2510 Hrs | **Engine Manufacturer:** | Continental |
| **ELT:** | Installed, activated, aided in locating accident | **Engine Model/Series:** | TSIO-520-P |
| **Registered Owner:** | JOINT AIR INC. | **Rated Power:** | 310 Horsepower |
| **Operator:** | CORPORATE AIRCRAFT MARKETING | **Operating Certificate(s) Held:** | None |
| **Operator Does Business As:** | | **Operator Designator Code:** | |

## Meteorological Information and Flight Plan

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| **Conditions at Accident Site:** | Visual (VMC) | **Condition of Light:** | Night/dark |
| **Observation Facility, Elevation:** | MKO ,610 ft msl | **Distance from Accident Site:** | |
| **Observation Time:** | 21:53 Local | **Direction from Accident Site:** | |
| **Lowest Cloud Condition:** | Clear | **Visibility** | 10 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 10 knots / None | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | 330° | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 30 inches Hg | **Temperature/Dew Point:** | -4°C / -10°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | FORT SMITH (FSM ) | **Type of Flight Plan Filed:** | None |
| **Destination:** | TULSA (TUL ) | **Type of Clearance:** | VFR |
| **Departure Time:** | 21:20 Local | **Type of Airspace:** | Class E |

## Airport Information

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|---|---|---|---|
| **Airport:** | DAVIS FIELD MKO | **Runway Surface Type:** | Concrete |
| **Airport Elevation:** | 610 ft msl | **Runway Surface Condition:** | |
| **Runway Used:** | 31 | **IFR Approach:** | None |
| **Runway Length/Width:** | 7200 ft / 150 ft | **VFR Approach/Landing:** | Forced landing |

## Wreckage and Impact Information

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| **Crew Injuries:** | 1 Serious | **Aircraft Damage:** | Substantial |
| **Passenger Injuries:** | | **Aircraft Fire:** | None |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 1 Serious | **Latitude, Longitude:** | 35.720729,-95.469924(est) |

## Administrative Information

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| **Investigator In Charge (IIC):** | Wigington, Douglas |
| **Additional Participating Persons:** | JERRY YATES; OKLAHOMA CITY , OK |
| **Report Date:** | June 3, 1997 |
| **Last Revision Date:** | |
| **Investigation Class:** | Class |
| **Note:** | |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=20129 |